## 147. A New Species of Errantiate Polychaete, Marphysa tamurai n. sp. 1)

By Shiro OKUDA.

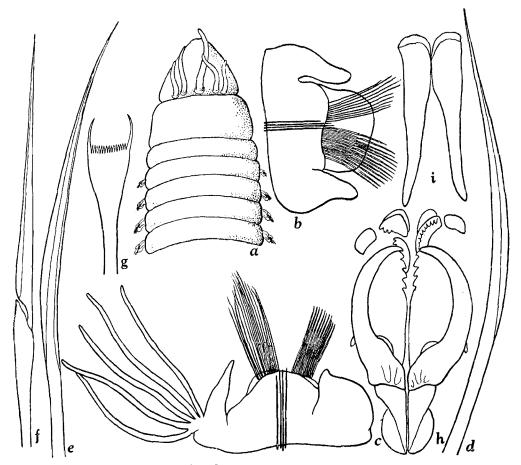
Zoological Institute, Faculty of Science, Hokkaido Imperial University, Sapporo. (Comm. by A. OKA, M.I.A., Oct. 12, 1934.)

The following description is based on a single specimen which was forwarded to me by Mr. M. Tamura, of the Hiroshima Fishery Station, the specific name being chosen as an expression of my gratitude to him for the specimen. The worm is common and is used as bait in the vicinity of Onomichi, Hiroshima Pref., under the name of "Bikuni-Mamushi."

## Marphysa tamurai n. sp.

Body, lacking posterior segments, consisting of 296 segments, 44 cm in length. Prostomium bluntly cone-shaped with a very faint notch at the anterior extremity and having a deep ventral transverse furrow. Tentacles five, arranged, more or less, in a row near the posterior margin of the prostomium; median tentacle longest and slightly longer than the prostomium, outer pair shorter than the inner pair and about two-thirds the length of the median tentacle. Eyes not visible in the preserved specimen. The buccal segment is about twice as long as the preceding. Gills bushy, always consisting of simple filaments. The first gills are found as minute papillae on the notocirri of the 42nd chaetiger. The maximum number of filaments in one segment is seven. The gills are well developed even on the last segment in the damaged specimen and extend probably a long way posterior as far as the The notocirri in the anterior region are digitiform and thickened at the base, but become slender caudad, with their tips extending slightly above the pedal lips. The neurocirri are stout and cylindrical in the anterior segments, but in the branchial region they become more swollen and smooth, and each reduce again to a small rounded mass with a short cylindrical tip. The parapodia become larger backwards up to the 9th segment. The ventral pedal lobes are conical in the anterior part and become flattened in the posterior part.

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a. Anterior segments.  $\times 4.5$ . b. 15th parapodium.  $\times 25$  c. 100th paradodium.  $\times 25$ . d, e. Limbate setae from 20th parapodium.  $\times 260$ . f. Compound seta from 95th paradodium.  $\times 260$ . g. Brush seta from 70th parapodium.  $\times 410$ . h. Maxillary apparatus.  $\times 8$ . i. Mandibles.  $\times 8$ .

The first parapodia have 6 black spines and setae arranged in two groups between the spines: the dorsal group consists of capillary limbate setae which are variable in length, though more slender and longer in the posterior segments and provided with very finely serrated blades. The ventral one is composed of compound setae, the blades of which are finely serrated and filamentous with narrowed tips. The 10th parapodia have 4 black spines and setae more in number. In the 20th parapodia there are 4 spines, and brush setae arising just anterior to the dorsal setae. They have obliquely expanded tips and are furnished with numerous fine teeth, of which the two outermost are much longer than the others. From the 50th segment backwards are often found 5 spines, of which 4 are black with a golden brown tip, one being colourless. The mandibles are deep brown at the posterior

ends, whitish in the anterior calcareous plates, which are subovate in form. The main portions of the maxillae are stout, boldly curved and each articulated with a posterior lobate process. The second maxillary plates have each 4 teeth on one side. The third plates are both curved, the right one being much longer than the left. The former bears 8 conical, the latter 3 teeth. The fourth azygous crescentic plate bears 5 teeth on the left side. In front of and on the sides of the anterior toothed plates 4 dark accessory patches are present. Caudal end and pygidium unknown. Collected at Onomichi, Hiroshima Pref. in September, 1934.

Remarks: Of the species of *Marphysa* with an undivided prostomium, *M. stragulum*, *M. bellii*, *M. adenensis*, *M. kinbergi* and *M. sinensis* are all characterised by the possession of gills confined to a few anterior segments, while *M. mortenseni* differs from the new form in having bidentate and hooded setae. This species, though closely allied to *M. macintoshi*, is distinguished from the latter by the dental apparatus and the tentacles.